

MINUTES
CHIEF OF ENGINEERS' ENVIRONMENTAL ADVISORY BOARD MEETING
Alexandria, Virginia
2 February 2005

1. The Chief of Engineers, **LTG Carl Strock**, called the Environmental Advisory Board (EAB) meeting to order at 0911 hours, 2 February 2004 at the Embassy Suites Hotel, Alexandria, Virginia. The following EAB members were present:

- **Mr. Kenneth Babcock**, Southern Regional Office, Ducks Unlimited
- **Dr. Michael Donahue**, President and CEO, Great Lakes Commission
- **Dr. Theodore Hullar**, Director, Higher Education Program, Atlantic Philanthropic Service Company, Inc.
- **Dr. G. Matthias Kondolf**, Associate Professor of Environmental Planning and Geography, University of California at Berkeley
- **Dr. George Crozier**, Executive Director, Dauphin Island Sea Lab
- **Dr. Courtney Hackney**, Professor of Biological Sciences, University of North Carolina, Wilmington

Also present were **MG Don Riley**, Director of Civil Works, **Mr. Bill Dawson**, Chief of Policy and Policy Compliance Division for Civil Works, the Policy and Planning Community of Practice (CoP), and the Mississippi Valley Division Regional Integration Team, **Ms. Pat Rivers**, Chief, Southwestern Division Regional Integration Team and of the Environment CoP, and **Mr. Norm Edwards**, Executive Secretary for the EAB.

2. WELCOMING REMARKS:

Mr. Edwards noted that the meeting was being conducted under Federal Advisory Committee Act (FACA) rules.

LTG Strock welcomed everyone and emphasized that the business meeting of the EAB was open to the public. He swore in the new members of the EAB and welcomed those who have been reappointed; those EAB members present introduced themselves. A quorum of the Board existed to conduct an official meeting. New Members included Dr. George Crozier, Dr. Stephen Farber, and Dr. Courtney Hackney.

LTG Strock reviewed his Corps of Engineers background, which included seven years with the Corps in the Pacific Ocean Division (POD) and Northwestern Division (NWD), as Director of Military Programs and Civil Works, and a recent tour in Iraq. He has been involved in environmental issues regarding coral systems in POD, the decision to breach or leave the Snake River dam, approval of the Missouri River Master Manual and dredging management plan, and large-scale environmental projects such as the Everglades, Coastal Louisiana, and Great Lakes Commission, all of which have raised his environmental knowledge and sensitivity. He said that the EAB was created in 1972 but in recent years was not fully utilized by the Chief of Engineers (Chief) until his predecessor, LTG Flowers. LTG Strock said that he is committed to the EAB and is looking for the EAB to be his conscience ("tell me what I need to know") and a review board to provide advice on water resources policy, issues of national significance, processes, legislative initiatives, and projects (as they implement integrated water resources management and sustainability concepts). The Chief also stated that he is committed to implement the Civil Works Strategic Plan and its overarching goal for sustainable solutions within an ecosystem context and to raise the discussion about integrated water resources management (IWRM) in a broad context. He promoted designing for IWRM up front by considering the environment during the project-planning phase versus mitigating for adverse environmental impacts as an

afterthought. He emphasized the importance of active listening and synergy to derive win-win solutions from true understanding of the mutual interests of the Corps and stakeholders.

3. EAB VIEWS AND COMMENTS:

Mr. Babcock, chair of the EAB, provided an overview of the EAB's work and conclusions from the prior two days of a working session with Corps of Engineers Institute for Water Resources (IWR) and Engineer Research and Development Center (ERDC) staffs, which he promised to provide the Chief in a written report. In summary, Mr. Babcock stated that the EAB supports the Chief's two-pronged approach to have the EAB comment on particular issues and become proactive observers of the Corps. He expressed the EAB's satisfaction with "one of the most productive interchanges we've had." Mr. Babcock reaffirmed the EAB's support for the Civil Works Strategic Plan and its foundation in adaptive management and the Environmental Operating Principles, which he encouraged the Chief of Engineers to institutionalize, along with enhanced communications to get the word out about the Strategic Plan so as to counter the perception that the plan is does not match the practice of project activities in the field. He stated that the EAB strongly supports a theme for the next meeting of ecosystem restoration through water resources management, involving all key stakeholders for sound win-win water resources management. The EAB plans to meet in June and November but will conduct working sessions in between meetings.

The issues the EAB wants to support include:

1. fragmented authorities
2. barriers to effective water resources management. These barriers interfere with adaptive management by the Corps, which many interpret as costly research and development rather than as critical project evaluation and management information derived from the feedback provided by monitoring.
3. institutional barriers to implementing the Civil Works Strategic Plan – especially the relationship with the Office of Management and Budget (OMB)
4. the inference from the Corps' focus on being the world's premier public engineering organization that only traditional engineering designed to control nature is emphasized rather than designing engineering solutions within a systems view with the environment in mind
5. ways to enhance partnerships and mutual understanding among them.

Other EAB members added detail to Mr. Babcock's summary.

Dr. Kondolf noted that monitoring provides lessons learned and patterns useful for future project planning, which supports the Corps as a learning organization. Part of this learning is an emphasis on data/information sharing (which Geospatial Information Systems facilitate) and conferences. Perhaps there is an opportunity to work with the Corps' Centers of Expertise to teach/promote a systems view to help the Corps transition from a construction-based agency to an ecosystems restoration-based agency.

Dr. Hullar said that learning might be an integrating theme. Consider that work and change are done within a social context, a systems context. Change and decision making must be managed within a systems context and involve interactions with external stakeholders (non-government organizations or NGOs, state and local partners). The EAB could play a key role in relationship-building with NGOs and industry CEOs. Such interaction requires active listening to foster understanding and information sharing to generate knowledge. This too would support the Corps as a learning organization.

Dr. Hackney said that a challenge for the Corps is to adopt a holistic view of designing solutions with nature in mind and also being ready to respond quickly (to fix things) within a command and control structure. What may help this is sharing of views across districts and engaging external stakeholders. Yet the fact that funding is driven by projects works against this holistic perspective.

Dr. Donahue supported the focus on sustainability and ecosystem restoration. We need to define terms so that we are clear about desired end states and consistent in communications. Performance measures and case studies would be helpful to translate concept into practice.

Dr. Crozier reiterated a need to define terms such as “sustainability.” We must find a way to relieve or better balance pressures on the Corps such as public demands for specific engineering solutions. Senses a disparity in assets (staff, talent, resources) between HQ and districts. We need to talk about adaptive management because it fosters a learning process, learning by doing, although this will create funding pressures; learning involves management learning and technology learning. We need to shift the mindset that adaptive management implies a change in direction of bad planning.

Mr. Babcock called for a leader to take on the fragmentation in authorities and responsibilities, which counters integrated water resources management. The Corps is the best candidate to play this leadership role and the Civil Works Strategic Plan provides a good foundation – one likely supported by most conservation agencies because the desire to sustain water provides a common theme. The EAB can play a role in helping the Corps play a leadership role.

4. GENERAL DISCUSSION:

Mr. Dawson expressed a need to find ways to finance the watershed view for integrated water resources management with diverse people with different and often conflicting views and interests. The Corps is trying to develop demonstration watershed projects. He sees a re-emergence of the river basin commission concept.

MG Riley reaffirmed the Corps’ challenge to develop balanced sustainable solutions for traditional partners who also want particularized solutions (e.g., flood control, dredging of harbors). Definitions will help clarify win-win solutions derived from a balanced view. He asked for a detailed agenda at the next EAB meeting so that the Corps can provide topical presentations in support of the discussion (e.g., sustainability, adaptive management) and the meetings can lead to definitive outputs. He also offered to link the EAB with the Coastal Engineering Research Board (CERB), a Corps advisory board that he chairs. The two (Boards) have many common interests and opportunities for exchange.

LTG Strock offered his views on issues raised by the EAB:

1. The inconsistency between what is in the Civil Works Strategic Plan and what is actually happening in the field on the ground: given the length of project planning cycles, most current projects were not designed with the watershed approach. We should do what we can, within existing authorities, to correct these non-alignments. Yet we must celebrate aspects of ongoing efforts that are consistent with the Strategic Plan. In fact, the Louisiana Coastal Area project is developed within a large ecosystem framework that lays out big issues of sediment management, restoration, and protection from further

degradation. It also builds in partnerships with science and technology partners for ongoing monitoring of 5 critical projects and demonstration projects for learning – a holistic adaptive management approach. We have opportunities to integrate ongoing Section 204 and 209 projects, to promote notions of “project” within a larger context. The Chief asked MG Riley to further investigate opportunities for such integration.

2. Fragmentation: we need to improve how we align across Federal agencies in terms of a common message about sustainability. As I can communicate how the Corps supports their mission accomplishment, I can ask them to do the same with respect to their ownership of our missions (concept of the ‘Federal family’). A good place for partnering is in terms of data sharing and discussions of adaptive management.
3. Partnerships: we need to do a better job of informing and educating environmental groups. The EAB can help me build bridges with NGOs who have been most critical of the Corps (e.g., American Rivers, National Wildlife Federation, Sierra Club) so that they and the Corps can work in a complementary fashion without being directly linked. I want to directly engage Ducks Unlimited, building on the existing MOU. The EAB can help me bridge to industry CEOs.
4. Institutional barriers: we must address them. We have an obligation to guide discussion more actively about water resources challenges to shape policy about wise resource management and not hide behind what Congress tells us to do. We know that the nation is driving toward greater environmental awareness and responsibility. Our Environment program comprises about 20% of the Civil Works budget. We are aware that we are subject to pressures from above, below, and outside our organization. The EAB can help us alleviate public pressure to do things that contradict our strategic goals. One problem we have is that OMB reduced our level of centralized funding for Headquarters and division-level (Major Subordinate Command) operations from the efficiencies we gained through our 2012 internal reorganization. Moreover, the field is going through adjustments to implement our new information system. Normal resistance to change is a factor. We must guard against creating regional “stovepipes” when we reorganized to reduce the inefficiencies of functional stovepipes and the tendency to stymie integration. Please note that I can only act when given specific authorities to do so. But the EAB can propose changes in authorities. George Crozier: the EAB has access to university-based advances in information technology that might be helpful to you in addressing efficiencies.
5. Definition of terms. Yes, we need to define terms such as “sustainability. We need to be sensitive to what the term “engineer” conveys. We must be more sensitive to how we communicate what we do. So much of our engineering work today actually is designed to work with nature, not control it. The Pick- Sloan Project on the Missouri River illustrates how engineering can be sustainable in our design of a self-sustaining channel that does not require ongoing dredging. Our public engineering emphasis is to convey our public service ethic. We will work at the corporate level on a new vision for the entire Corps; we first need to see ourselves differently (i.e., more than just engineers) before others can see us differently. Ken Babcock: people would be surprised to know that an organization like Ducks Unlimited, which is dedicated to protecting and conserving wetlands and the waterfowl/wildlife they support has a large percentage of engineers on our staff. Pat Rivers: in the Federal government, the Engineer and Construction career field actually contains many career areas such as architecture and natural science.
6. Being a learning organization but not emphasizing adaptive management enough: we have barriers in terms of a lack of project authorities for adaptive management. The EAB

can help engage Congress in this conversation. I will reinvigorate the emphasis our Learning Advisory Board. I will look at having our Centers of Expertise promote knowledge more generally. I want to know more about the social context of organizations that you expressed.

LTG Strock then provided a prioritized list of areas/issues for the EAB:

1. Look at Corps authorities in light of changing needs of the nation. Tell me if I need new legislation or authorities. Include policies and processes in this review.
2. Advise me about resources that I can tap into beyond the appropriations the Corps receives to address environmental issues. Include how to leverage human capital.
3. Look at workforce requirements for a workload 5 years out. Advise me on how to shape my workforce.
4. Examine the Regulatory function to recommend ways to streamline processes and increase consistency in regulatory decisions across the Corps.
5. Advise me on how to increase and improve adaptive management in the Corps.
6. Recommend how to articulate value for environmental outputs in a way that I can understand the return on investment for environmental investments in a decision-making model.
7. Advise me how to measure and monitor actual project benefits achieved and how to share information about these results.
8. Help me improve my outreach to environmental NGOs and communications with them.
9. Advise me about when in the project life cycle independent review is needed.
10. Specify a mechanism for providing me with advice. I would like more rigor to move toward solutions, although I don't want a rigid process.
11. Advise me on project priorities. Within a performance-based budgeting system, we must concentrate our resources on high-payoff projects. How can I balance an annual review within the context of a multi-year project life cycle?
12. Examine the Corps' Research and Development program to identify when/how best to focus R&D on environmental issues. The Engineer Research and Development Center (ERDC) will provide a program overview.
13. Revisit issues regarding the Great Lakes (focus of the November EAB meeting that was cancelled).

5. EAB RESPONSE

Mr. Babcock responded that the EAB would consolidate its response as a list of issues and a range of options for addressing them so as to ensure deliverables.

Dr. Hullar advised that it would be best to put the EAB's list within a systems context. Relationships and knowledge were identified as common themes across the items on the Chief's list; they can be blended into a learning system. The system must address both "what" and "how." In this regard, adaptive management is the "what"; the learning organization may be the "how" to foster improved ways of doing business.

LTG Strock commented that the challenge is to find ways to move toward solutions. External relationships are the key to this. We also appreciate that the Corps has a spectrum of missions that allow it to function in peacetime and wartime. We must respect an interdisciplinary approach.

Dr. Hackney reiterated that the challenge is also to preserve critical capabilities in the Corps. The Corps' new role may be as a mediator between old ways of thinking and new ways of thinking. But it will take some work to have people accept this new role for the Corps.

LTG Strock stated that one of the values of the Corps is that it serves a balancing function. If the missions of the Corps were given to other disparate agencies, the nation would not benefit as much as having a single collaborative agency dedicated to an integrated view.

Mr. Babcock asked if, in looking at the big picture with respect to the issues identified by the Chief and his emphasis on external issues, may the EAB also examine internal issues? The Chief replied that he is most concerned with external issues but it is acceptable to comment on internal issues. Pat Rivers reiterated that the systems view requires a focus on both internal and external issues.

6. PUBLIC COMMENT

Given no public comments or questions, **LTG Strock** emphasized that he wants an active dialogue with the EAB on issues identified at this meeting. He noted that although the emphasis was on water resources issues (the Civil Works mission), the environmental mission also comprises military issues (e.g., cleanup, sustainable design) so that it is important to extrapolate from civil missions to military missions.

7. ADJOURNMENT:

Mr. Babcock, on behalf of the EAB, expressed enthusiasm for this dialogue.

LTG Strock committed his staff (IWR, ERDC) to support the EAB's work.

There being no further business, the meeting was adjourned at 1200 hours.